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Remarks

The Examiner's comments and objections and the cited references have been carefully considered by the Applicant.

Claims 1 and 18 are amended.

Claim Rejection - 35 USC § 112

Claim 10 is rejected under 35 U.S.C 112, second paragraph, because of incomplete sentence.

However, previously submitted claim 10 reads:

*"10. (previously presented) The composite material according to claim 5, wherein the preponderant fraction of said glass particles have a size from 0.4 to 0.9 mm."*

It is considered that the claim 10 particularly points out and distinctly claims the subject matter which the applicant regards as the invention.

Claim Rejection - 35 USC § 103

Claims 1-7, 9, 11-15, 18, 20-22 were rejected as being unpatentable over Minghetti et al. in view of Laverrier.

The following however to be noted.

Independent claim 1 requests that the filler material be constituted by  
(1) glass particles the predominant fraction of which has  
(2) a size distribution from 0.2 to 1.5 mm, that is from 200 to 1,500 microns, with  
(3) a concentration of the glass particles of more than 60% and up to 85 % based on the total weight of the composition.

None of features (1), (2) and (3) is thought or suggested by Minghetti et al.

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Regrading feature 1, the Examiner acknowledges that Minghetti et al. do not disclose glass particles.

Regarding feature (2), i.e. the size of the glass particles being from 200 to 1.500 microns, even if as the Examiner alleges Minghetti et al. disclose on column 3, lines 29-30 particulates *not to be visibly distinguishable* in the finished product, Minghetti et al. also disclose that particles in the range from 150 to 500 microns are distinguishable particles (col. 3, lines 31-34). Thus, the glass particles from 200 to 1.500 microns of the claimed composition are clearly not within the mining given in Minghetti et al to "particulates not visibly distinguishable".

Moreover, Minghetti et al. explicitly indicate that in the context of their invention the majority of particles will be *less than about 90 microns*, and preferably less than 60 microns.

Thus, Minghetti et al. do not disclose particles with a size between 0.2 and 1.5 mm, as requested by claim 1.

In addition, Minghetti et al. not only do not suggest particles with a size between 0.2 and 1.5 mm, as requested by claim 1, but also teach away from the use of particles with a size in the range from 0.2 and 1.5 mm in the composition discloses therein, since they explicitly indicate that the use of larger particles can inhibit the even distribution of the particles (col. 5, lines 36-37).

Regarding feature (3), the concentration of glass particles of **more than 60 % and up to 85 %**, is requested by claim 1, while Minghetti et al. disclose a concentration of particles of **20 to 60%**.

Thus, even if the the particulates in the composition of Minghetti et al. were replaced with glass microbeads, the claimed composition would not have been obtained.

Moreover, the Applicant has found that the claimed composition including glass particles the predominant fraction of which has (2) a size distribution from 0.2 to 1.5 mm, that is from 200 to 1.500 microns, with (3) a concentration of the glass particles of more than 60% and up to 85 % based on the total weight of the composition, are very effective in preventing proliferation of germs and bacteria. The results of the tests submitted with the Applicant's declaration on May 22, 2007 can be seen for example in this sense. No one of the documents of reference recognizes the size and concentration

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of glass particles as being *a result-effective variable*, i.e. a variable which achieves a recognized result. Thus, the determination of the ranges of particle size and concentration, specifically in combination, cannot be considered to be the determination of optimum ranges that might be characterized as a routine experimentation.

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It is thus submitted that the subject matter claimed in claim 1 could not have been derived by the skilled person in an obvious manner from the teachings of Minghetti et al. and Leverrier.

Independent claim 18 includes the limitations of claim 1 and for the same reasons exposed in relation with claim 1, the subject matter of claim 18 could not have been derived by the skilled person in an obvious manner from the teachings of Minghetti et al. and Leverrier.

Independent claim 20 requests glass beads with a size distribution from 200 to 1.500 microns in combination with a PMMP content of 25-30% by wt based on the polymer matrix. Minghetti et al. disclose a particulate with a size distribution such as not to be distinguishable in the final product, wording used by Minghetti et al. to indicate a size that is not more than 150 microns, as explained for claim 1, being in the context of their invention less than 90 micron.

Thus, even by replacing the particulate of Minghetti et al. with glass beads, the material claimed in claim 20 is not obtained.

In addition, Minghetti et al. not only do not suggest particles with a size between 0.2 and 1.5 mm, as requested by claim 1, but also teach away from the use of particles with a size in the range from 0.2 and 1.5 mm in the composition discloses therein, since they explicitly indicate that the use of larger particles can inhibit the even distribution of the particles (col. 5, lines 36-37).

It is thus submitted that the subject matter claimed in claim 1 could not have been derived by the skilled person in an obvious manner from the teachings of Minghetti et al. and Leverrier.

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Independent claim 21 requests glass beads with a size distribution from 200 to 1,500 microns in combination with a polymeric matrix in a percentage of 40-15%.

At least for the same reasons exposed for claim 20 the subject matter of claim 21 could not have been derived by the skilled person in an obvious manner from the teachings of Minghetti et al. and Leverrier.

In addition, Menghetti et al. only show the polymer composition in a percentage of 59.75 %. Moreover, the percentage of polymer in the composition is not recognized as a result-effective variable, i.e. a variable which achieves a recognized result. Thus, the determination of the ranges of polymer percentage cannot be considered to be the determination of optimum ranges that might be characterized as a routine experimentation.

It is thus submitted that the subject matter claimed in claim 21 could not have been derived by the skilled person in an obvious manner from the teachings of Minghetti et al. and Leverrier.

The rejection based on Menghetti et al. and Leverrier is a hindsight reconstruction of the prior art, which reconsideration could have been perceived only after seeing the Applicant's disclosure.

In view of the foregoing, favorable action on the merits, including entry and approval of all amendments, reconsideration and withdrawal of each rejection and allowance of all claims is respectfully solicited.

Respectfully submitted,

  
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